F-SWNT + H₂N-(CH₂)_n-C-O-R
$$\xrightarrow{\text{Py, 150°C}}$$
 SWNT-[N-(-CH₂)_n-C-OR]_n

1 2 3

wherein $R = -CH_3$, $-CH_2CH_3$, etc.

Scheme 1

^{*}e.g., hydrolysis performed with a 50%/50% v/v water-ethanol solution comprising an alkalai carbonate or bicarbonate

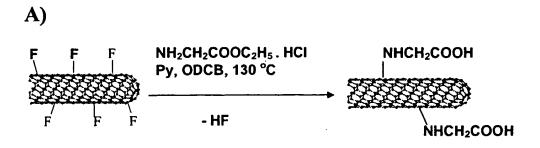
SWNT + HO-C-CH₂CH₂-C-O-C-CH₂CH₂-C-OH
$$\xrightarrow{\text{heat}}$$
 SWNT-(CH₂CH₂-C-OH)_n + CO₂

5

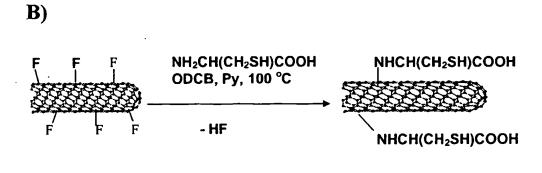
6

7

Scheme 2



"Glycine-nanotubes"



"Cysteine-nanotubes"

Fig. 3